

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A switching device for telecommunication networks, comprising:

- a number of I/O ports for inputting incoming data streams and outputting outgoing data streams of arbitrary protocols, said I/O ports being arranged in groups while said groups being respectively positioned on two or more I/O cards;
- at least a basic a switching fabric SF block for handling internal data streams,
- a number of adaptation functional blocks AFBs associated with at least said basic switching fabric SF block and forming a common pool of AFBs of at least said basic SF block, wherein each AFB being capable of performing at least one of the following adaptation functions:

- I. converting one or more of said incoming data streams or of portions of said incoming data streams into one or more said internal data streams suitable for being handled in the SF; and
- ii. converting one or more said internal data streams handled by the SF into one or more said outgoing data streams or portions thereof;

and

- a cross-connecting distribution block DB ~~adapted to allow for~~ switching between said I/O ports and said adaptation functional blocks AFBs and configurable to provide a required connection between any of said I/O ports positioned on any of said I/O cards, and any of said adaptation functional blocks AFBs from said common pool of AFBs.

2. (currently amended) The switching device according to Claim 1, wherein the basic switching fabric SF block comprises is an ATM switch (ATM SF).

3. (currently amended) The switching device according to Claim 1, wherein said AFB blocks form integral part of the at least said basic switching fabric SF block.

4. (cancelled)

5. (currently amended) The switching device according to Claim 1, wherein the distribution block DB is configurable to interconnect between any of said I/O ports in any of said I/O cards and any other of said I/O ports in any of said I/O cards.

6. (original) The switching device according to Claim 1, wherein the distribution block DB comprises one or more ingress/egress connections and is further configurable to interconnect any of said I/O ports to any of said ingress/egress connections thereby

enabling traffic to exit said DB and access from outside to said DB.

7. (currently amended) The switching device according to Claim 6, comprising an additional switching fabric block associated with an additional group of adaptation functional blocks AFB, the additional switching fabric block being connectable to the I/O blocks cards via the ingress/egress connections of said DB.

8. ( currently amended) The switching device according to Claim 7, wherein the additional switching fabric block is of the same type as the basic switching fabric block.

9. (currently amended) The switching device according to Claim 7, wherein the additional switching fabric block is capable of handling internal data streams having a protocol other than the protocol of the internal data streams of the basic switching fabric block.

10. (original) The switching device according to Claim 1, wherein the DB is configurable to perform protection functions.

11. (original) The switching device according to Claim 1, adapted to handle the incoming data streams having protocol(s) selected from the following non-exhaustive list comprising: ATM, IP, Ethernet, PDH (TDM), SDH/SONET(TDM), Frame relay, Optical signals.

12. (original) The switching device according to Claim 1, wherein said distribution block DB is a TDM non-blocking matrix capable of switching PDH and SDH/SONET high order and low order data streams.

13. (original) The switching device according to Claim 1, wherein one of said adaptation functional blocks AFB is designed for implementing IMA adaptation function (Inverse Multiplexing over ATM).

14. (currently amended) The switching device according to Claim 1, adapted for serving cellular communication networks, so that at least one of the incoming data streams and/or of the outgoing data streams is of a cellular communication network protocol.

15. (original) The switching device according to Claim 11, wherein said distribution block DB is a TDM non-blocking matrix capable of switching PDH and SDH/SONET high order and low order data streams, and wherein at least some of said I/O ports are provided with means for formatting the incoming data streams into the SONET/SDH format.

16. (currently amended) An assembly to be used in a switching device, wherein the switching device is intended for inputting incoming data streams of arbitrary protocols via I/O cards each comprising a group of I/O ports blocks, converting the incoming data streams into internal data streams by adaptation functional blocks AFBs, handling the internal data streams in a switching

fabric SF, converting the internal data streams into outgoing data streams of arbitrary protocols by the adaptation functional blocks and outputting the outgoing data streams via the I/O blocks,

and wherein the assembly comprises the switching fabric SF composed of at least a basic SF block, integrally interconnected with a number of said adaptation functional blocks forming a pool of AFBs, so that said I/O blocks cards are separated from said adaptation functional blocks, thereby allowing for providing selective connections between any I/O port in any of said I/O blocks cards and any adaptation functional block of said pool of AFBs.

17. (presently amended) The assembly according to Claim 16, wherein the basic switching fabric block SF is an ATM switching fabric ATM SF.

18. (original) The assembly according to Claim 17, comprising at least one adaptation functional block capable of performing IMA function (Inverse Multiplexing over ATM) with respect to a number of the incoming/outgoing data streams.

19. (currently amended) A method of switching data streams in a switching structure comprising a number of I/O ports arranged by groups placed on respective I/O cards, a number of adaptation functional blocks AFBs forming a pool, and a switching fabric SF, the method comprises the steps of:

inputting incoming data streams of arbitrary protocols via  
I/O ports placed on different said the I/O cards blocks;

formatting at least some of the incoming data streams to obtain all incoming data streams in a common format suitable for further distribution;

selectively distributing the thus formatted incoming data streams or portions thereof between the adaptation functional blocks of the pool so that any such incoming data stream or portion thereof is connectable to any selected AFB of the pool;

converting the thus formatted incoming data streams or portions thereof, into internal data streams by the selected adaptation functional blocks AFBs;

handling the internal data streams at the switching fabric SF;

converting the internal data streams, by the adaptation functional blocks of the pool, into data streams formatted using the common format; and

distributing the thus obtained formatted data streams between the I/O cards and I/O ports blocks to be further outputted in arbitrary protocols.

20. (currently amended) The method according to Claim 19, wherein the SF comprises at least a basic is an ATM SF block, and the step of distribution is provided at the SDH/SONET (TDM) or PDH (TDM) format.

21. (original) The assembly according to Claim 16, wherein each AFB is capable of performing at least one of the following adaptation functions:

- converting one or more of said incoming data streams or of portions of said incoming data streams into one or more said internal data streams suitable for being handled in the SF; and
- converting one or more said internal data streams handled by the SF into one or more said outgoing data streams or portions thereof.